

## IN THE CLAIMS

Please amend claims 1, 7, 13, 14, 16, and 17-22 to read as follows:

### 1. (Amended)

1 A carburetor, comprising:  
2 a metallic body having a fuel and air mixing passage through which a fuel and  
3 air mixture is delivered to an engine;  
4 a throttle valve assembly movable in the fuel and air mixing passage between  
5 idle and wide open positions, said valve assembly having a polymeric shaft rotatable relative  
6 to the carburetor body;  
7 a separate polymeric cam body connected to the shaft for rotation in unison  
8 with the shaft;  
9 a separate valve head in communication with the fuel and air mixing passage  
10 and carried by the shaft for rotation in unison with the shaft,  
11 the shaft being journaled for rotation in integral bores in one portion of the  
12 carburetor body;  
13 the cam body being configured to be connected to an actuator wire for  
14 movement of the shaft and valve head between the idle and wide open positions; and  
15 at least one stop carried by the body and engageable by the cam to limit  
16 rotation of the valve assembly to at least one of the idle position and wide open throttle  
17 positions of the valve head of the valve assembly.

**7. (Amended)**

1                   The carburetor of claim 2 wherein the elongate slot in the shaft has a length  
2 greater than the width of the portion of the valve head received in the slot and greater than  
3 the width of the mixing passage at the location where the shaft extends across the mixing  
4 passage.

**13. (Amended)**

1                   A carburetor, comprising:  
2                   a carburetor body having a fuel and air mixing passage through which air  
3 flows and through which fuel is delivered to an engine;  
4                   a valve assembly movable in the fuel and air mixing passage between first and  
5 second positions, said valve assembly having a polymeric shaft rotatable relative to the  
6 carburetor body;  
7                   a polymeric cam body connected to the shaft for rotation with the shaft;  
8                   a valve head in communication with the fuel and air mixing passage and  
9 carried by the shaft for rotation with the shaft; and  
10                  the shaft has a groove formed therein and the cam body has a bore and a tab  
11 extending into the bore with the tab constructed and arranged to be received in the groove  
12 when the cam body is fully received on the shaft.

14. (Amended)

Sub  
C2  
1 A throttle valve assembly for a carburetor comprising:

2 a carburetor body with a fuel and air mixing passage;

3 a throttle polymeric shaft rotatably carried by the carburetor body in  
4 communication with the fuel and air mixing passage and having a slot formed therethrough  
5 between its ends, the shaft also being axially movable relative to the mixing passage and the  
6 carburetor body;

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7 a throttle cam body connected to the shaft for co-rotation in unison with the  
8 shaft to engage at least one stop carried by the carburetor body to limit rotation of the throttle  
9 valve assembly;

10 a valve head carried by the shaft for rotation in unison with the shaft, in  
11 communication with the fuel and air mixing passage and disposed in part in the slot so that  
12 rotation of the shaft changes orientation of the valve head relative to the fuel and air mixing  
13 passage to control fluid flow through the fuel and air mixing passage; and

B  
14 the length of the slot <sup>through</sup> ~~thorough~~ the shaft being greater than the width of the  
15 portion of the valve head received in the slot of the shaft and greater than the width of the  
16 mixing passage at the location of the shaft in the mixing passage so that the shaft is movable  
17 axially relative to both the valve head and the mixing passage to center the valve head in the  
18 mixing passage.

**16. (Amended)**

1                   The valve assembly of claim 14 wherein the valve head is generally circular  
2                   and generally flat, and the slot has a length greater than the diameter of the valve head so that  
3                   the valve head can shift within the slot generally axially relative to the shaft.

**17. (Amended)**

1                   The valve assembly of claim 14 wherein the slot spans the entire fuel and air  
2                   mixing passage, the shaft is journalled for rotation at least in part beyond each end of the slot,  
3                   a spring is received over the shaft between the cam body and the carburetor body, and a  
4                   retainer is received on the shaft adjacent an end of the shaft distal from the cam body and  
5                   adjacent the carburetor body.

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**18. (Amended)**

1                   The valve assembly of claim 14 wherein the shaft has a flat surface and the  
2                   cam body has at least one shoulder which engages the flat surface of the shaft to prevent  
3                   relative rotation between the shaft and cam body.

**19. (Amended)**

1                   The valve assembly of claim 14 wherein the cam body is integrally formed  
2                   with the shaft.

20. (Amended)

1 The valve assembly of claim 14 wherein the cam body is pressed onto the  
2 shaft and is retained on the shaft by an interference fit.

21. (Amended)

1 The valve assembly of claim 20 wherein the shaft has a groove formed therein  
2 and the cam body has a throughbore and a tab extending into the throughbore with the tab  
3 constructed and arranged to be received in the groove when the cam body is fully received  
4 on the shaft.

22. (Amended)

1 The valve assembly of claim 14 wherein the shaft has a portion with a non-  
2 circular cross-section constructed and arranged to be received in a complimentary ~~no circular~~ <sup>non-circular</sup>  
3 recess in the cam body to prevent relative rotation between the shaft and the cam body.

Please ADD the following claims 23-24:

23. (Added)

Sub C 3  
1 A valve assembly comprising:  
2 a carburetor body with a mixing passage, and a pair of co-axial bores on  
3 opposite sides of the mixing passage and extending substantially transversely to the  
4 longitudinal axis of the mixing passage,

5 a polymeric valve shaft extending transversely through the mixing passage  
6 and journaled for rotation in the bores, being axially movable relative to the mixing passage  
7 and the carburetor body and having a slot therethrough between its ends;

8 a valve head received in the mixing passage, disposed in the slot and carried  
9 by the shaft for rotation in unison with the shaft so that rotation of the shaft changes the  
10 orientation of the valve head relative to the mixing passage to control fluid flow through the  
11 mixing passage; and

12 the length of the slot through the shaft being greater than the width of the  
13 portion of the valve head disposed in the slot of the shaft and greater than the width of the  
14 mixing passage at the location of the shaft in the mixing passage so that the shaft is movable  
15 axially relative to both the valve head and the mixing passage to center the valve head in the  
16 mixing passage.

24. (Added)

1 The valve assembly of claim 23 wherein the valve head also comprises at least  
2 two spaced-apart stops with at least one stop disposed on each of opposite sides of the shaft  
3 with the distance between the stops on opposed sides of the shaft being greater than the  
4 portion of the shaft received between the stops so that the stops limit the extent to which the  
5 valve head can move transversely to the shaft and the valve head can shift transversely to  
6 the axis of the shaft to center the valve head in the mixing passage when the shaft is rotated  
7 to cause the valve head to at least substantially close the mixing passage.